

## EAST Search History

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
L1	125	(holladay.in. OR alza.as.) AND ((human adj growth adj hormone adj releasing adj hormone) OR H-GHRH OR HGHRH OR GHRH OR GRF)	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	OFF	2007/03/13 08:13
L2	67	I1 and electrotransport	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	OFF	2007/03/13 08:13
L3	49	I1 and electrotransport.clm.	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	OFF	2007/03/13 08:13
L4	8	I3 and (mutant OR analog OR analogue or mutagenesis)	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	OFF	2007/03/13 08:15
L5	5	I4 and (histidine or glutamine)	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	OFF	2007/03/13 08:15
L6	6	I4 and (histidine OR his OR Gln or glutamine)	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	OFF	2007/03/13 08:15
L7	4373	"Growth Hormone Releasing Hormone" or gHRH or GRF or "Growth Hormone-Releasing Factor" or "Growth Hormone Releasing Factor" or "Growth Hormone-Releasing hormone" or Somatocrinin or Somatoliberin or "Somatotropin-Releasing Factor" or "somatotropin Releasing Factor" or "Somatotropin-Releasing Hormone" or "Somatotropin Releasing Hormone"	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	OFF	2007/03/13 08:24
L8	936	I7 same ("16" OR "24" OR "30" OR "31" OR "36")	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	OFF	2007/03/13 08:25
L9	936	I7 same ("16!" OR "24!" OR "30!" OR "31!" OR "36!")	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	OFF	2007/03/13 08:25
L10	80	I9 same (glutamine OR gln)	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	OFF	2007/03/13 08:25

## EAST Search History

S1	2	"5494679".pn.	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	OFF	2006/10/24 10:50
S2	4	(somatotropin-releasing adj hormone) or (growth adj hormone adj releasing adj hormone)	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	OFF	2006/03/21 14:51
S3	1134	ghrh and hormone	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	OFF	2006/03/21 14:51
S4	0	S1 and (ghrh near10 (mutation or mutant or variant or substitution))	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	OFF	2006/03/21 14:52
S5	32	S3 and (ghrh near10 (mutation or mutant or variant or substitution))	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	OFF	2006/03/21 14:53
S6	53	S3 and (ghrh near10 (mutation or mutant or variant or substitution or analog))	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	OFF	2006/03/21 14:53
S7	55	(ghrh near10 (mutation or mutant or variant or substitution or analog))	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	OFF	2006/03/21 14:53
S8	55	S6 or S7	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	OFF	2006/03/21 15:07
S9	2	"4914189".pn.	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	OFF	2006/03/22 07:56
S10	135	grf and hormone and ((thr near5 his) or (thr near5 histidine) or (threonine near5 his) or (threonine near5 histidine))	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	OFF	2006/03/22 10:46
S11	84	S10 and analog	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	OFF	2006/03/22 08:32
S12	0	holladay.in. and hgrh	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	OFF	2006/03/22 08:33

## EAST Search History

S13	5	holladay.in. and ghrh	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	OFF	2006/03/22 08:34
S14	4	S13 and (threonine or thr)	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	OFF	2006/03/22 10:38
S15	63	grf and (iontophore\$ or electrotransport)	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	OFF	2006/03/22 09:50
S16	170	\$grf near10 (mutant or mutation or variant or substitut\$ or analog)	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	OFF	2006/03/22 10:44
S17	156	S16 and hormone	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	OFF	2006/03/22 10:39
S18	83	S17 and (threonine or thr)	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	OFF	2006/03/22 10:44
S19	56	ghrh near10 (mutant or mutation or variant or substitut\$ or analog)	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	OFF	2006/03/22 10:45
S20	33	S19 and (threonine or thr)	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	OFF	2006/03/22 10:44
S21	341	ghrh near10 (mutant\$ or mutation\$ or variant\$ or substitut\$ or analog\$ or analogue\$)	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	OFF	2006/03/22 10:45
S22	11	S21 and hormone and ((thr near5 his) or (thr near5 histidine) or (threonine near5 his) or (threonine near5 histidine))	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	OFF	2006/03/22 10:48
S23	22061	(thr near5 his) or (thr near5 histidine) or (threonine near5 his) or (threonine near5 histidine)	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	OFF	2006/03/22 10:48
S24	217	S23 and (\$grf or hgrh)	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	OFF	2006/03/22 10:55

## EAST Search History

S25	213	S24 and (analog\$ or mutant\$ or variant\$ or substitut\$ or mutation\$ or analogue\$)	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	OFF	2006/03/22 10:50
S26	22061	(thr near5 his) or (thr near5 histidine) or (threonine near5 his) or (threonine near5 histidine)	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	OFF	2006/03/22 13:53
S27	1754	S26 and (bioactive and peptide)	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	OFF	2006/03/22 13:54
S28	16629	(thr near2 his) or (thr near2 histidine) or (threonine near2 his) or (threonine near2 histidine)	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	OFF	2006/03/22 14:01
S29	1754	S27 and (bioactive and peptide)	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	OFF	2006/03/22 13:54
S30	916	S29 not ((thr adj his) or (thr adj histidine) or (threonine adj his) or (threonine adj histidine))	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	OFF	2006/03/22 14:02
S31	916	S30 and (bioactive or pharmaceutical)	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	OFF	2006/03/22 13:56
S32	352	S31 and peptide.clm.	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	OFF	2006/03/22 13:56
S33	634	S30 and (bioactive or pharmaceutical)	USPAT; EPO; JPO; DERWENT	OR	OFF	2006/03/22 13:58
S34	241	S33 and peptide.clm.	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	OFF	2006/03/22 13:56
S35	6970	S28 not ((thr adj his) or (thr adj histidine) or (threonine adj his) or (threonine adj histidine))	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	OFF	2006/03/22 13:57
S36	4856	S35 and (mutant or variant or analog)	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	OFF	2006/03/22 13:59

## EAST Search History

S37	926	S36 and peptide.clm.	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	OFF	2006/03/22 13:58
S38	706	S36 and peptide.clm.	USPAT; EPO; JPO; DERWENT	OR	OFF	2006/03/22 13:58
S39	506	S38 and (bioactive or pharmaceutical)	USPAT; EPO; JPO; DERWENT	OR	OFF	2006/03/22 13:58
S40	4114	S35 and (mutant or variant or analog)	USPAT; EPO; JPO; DERWENT	OR	OFF	2006/03/22 13:59
S41	4114	S40 not ((his-thr) or (thr-his))	USPAT; EPO; JPO; DERWENT	OR	OFF	2006/03/22 13:59
S42	16629	((thr near2 his) or (thr near2 histidine) or (threonine near2 his) or (threonine near2 histidine))	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	OFF	2006/03/22 14:02
S43	22061	((thr near5 his) or (thr near5 histidine) or (threonine near5 his) or (threonine near5 histidine))	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	OFF	2006/03/22 14:02
S44	9906	S43 NOT ((thr adj his) or (thr adj histidine) or (threonine adj his) or (threonine adj histidine) or (thr-his) or (his-thr))	USPAT; EPO; JPO; DERWENT	OR	ON	2006/03/22 14:05
S45	3190	S44 and (bioactive or (biologically adj active))	USPAT; EPO; JPO; DERWENT	OR	ON	2006/03/22 14:05
S46	963	S45 and (peptide.ab. or peptide.clm.)	USPAT; EPO; JPO; DERWENT	OR	ON	2006/03/22 14:06
S47	739	S45 and (peptide.clm.)	USPAT; EPO; JPO; DERWENT	OR	ON	2006/03/22 14:06
S48	739	S45 and (peptide.clm.)	USPAT	OR	ON	2006/03/22 14:14
S49	11	insulin and derivative and markussen. in.	USPAT	OR	ON	2006/03/22 14:15
S50	2003	growth adj hormone adj releasing adj factor	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	OFF	2006/04/20 07:53
S51	0	S50 near5 iontophoresis	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	OFF	2006/04/20 07:05

## EAST Search History

S52	0	S50 near5 electrotransport	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	OFF	2006/04/20 07:05
S53	3	S50 near5 transdermal	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	OFF	2006/04/20 07:07
S54	92	S50 and iontophoresis	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	OFF	2006/04/20 07:07
S55	2481	(growth adj hormone adj releasing adj factor) or ((ghrf or grf) and hormone)	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	OFF	2006/04/20 08:04
S56	161	S55 and (iontophoresis or electrotransport)	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	OFF	2006/04/20 07:54
S57	0	((growth adj hormone adj releasing adj factor) or ((ghrf or grf) and hormone)) near5 (iontophoresis or electrotransport)	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	OFF	2006/04/20 07:55
S58	0	((growth adj hormone adj releasing adj factor) or ((ghrf or grf) and hormone)) near5 (iontophoresis or electrotransport)	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	OFF	2006/04/20 07:55
S59	1	((growth adj hormone adj releasing adj factor) or ((ghrf or grf) and hormone)) near10 (iontophoresis or electrotransport)	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	OFF	2006/04/20 07:55
S60	161	((growth adj hormone adj releasing adj factor) or ((ghrf or grf) and hormone)) and (iontophoresis or electrotransport)	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	OFF	2006/04/20 08:03
S61	2481	(growth adj hormone adj releasing adj factor) or ((ghrf or grf) and hormone)	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	OFF	2006/04/20 08:04
S62	278	S61 and ((threonine or thr) near5 (histidine or his))	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	OFF	2006/04/20 08:04
S63	149	S61 and ((threonine or thr) near2 (histidine or his))	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	OFF	2006/04/20 11:50

## EAST Search History

S64	9678	((threonine or thr) adj (histidine or his))	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	OFF	2006/04/20 11:51
S65	108	S64 and iontophoresis	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	OFF	2006/04/20 11:53
S66	2277	S64 and insulin	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	OFF	2006/04/20 11:53
S67	1536	S66 and stability	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	OFF	2006/04/20 11:54
S68	43	S67 and a8	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	OFF	2006/04/20 11:56
S69	28	insulin and ((threonine or thr) near5 a8)	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	OFF	2006/04/20 11:58
S70	4	insulin and (((threonine or thr) and (his or histidine)) near5 a8)	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	OFF	2006/04/20 12:22
S71	5	insulin and (((threonine or thr) and (his or histidine)) near5 (b27 or b30))	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	OFF	2006/04/20 12:32
S72	18	(a8 near10 thr near10 his)	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	OFF	2006/04/20 12:34
S73	8	jensen.in. and a8 and analogue	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	OFF	2006/04/24 12:52
S74	2	"4528190".pn.	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	OFF	2006/10/24 11:34
S75	103549	(histidine or His) same ("16" OR "30" OR "31" OR "36")	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	OFF	2006/10/24 11:35

## EAST Search History

S76	807	(histidine or His) same ("16" OR "30" OR "31" OR "36") SAME MUTANT	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	OFF	2006/10/24 11:36
S77	807	(histidine or His) same ("16" OR "30" OR "31" OR "36") SAME MUTANT	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	OFF	2006/10/24 12:39
S78	1	S77 and (iontophoresis or electrotransport)	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	OFF	2006/10/24 12:39
S79	4333	"Growth Hormone Releasing Hormone" or gHRH or GRF or "Growth Hormone-Releasing Factor" or "Growth Hormone Releasing Factor" or "Growth Hormone-Releasing hormone" or Somatocrinin or Somatoliberin or "Somatotropin-Releasing Factor" or "somatotropin Releasing Factor" or "Somatotropin-Releasing Hormone" or "Somatotropin Releasing Hormone"	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	OFF	2007/02/21 15:22
S80	507	S79 same (mutant or analog or analogue or variant)	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	OFF	2007/02/21 12:18
S81	476	S80 and (16! OR 30! OR 31! OR 36!)	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	OFF	2007/02/21 12:27
S82	2	"5939386".pn.	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	OFF	2007/02/21 12:34
S83	2	"7053282".pn.	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	OFF	2007/02/21 13:21
S84	2	"4518586".pn.	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	OFF	2007/02/21 13:21



## EAST Search History

S85	4333	"Growth Hormone Releasing Hormone" or gHRH or GRF or "Growth Hormone-Releasing Factor" or "Growth Hormone Releasing Factor" or "Growth Hormone-Releasing hormone" or Somatocrinin or Somatoliberin or "Somatotropin-Releasing Factor" or "somatotropin Releasing Factor" or "Somatotropin-Releasing Hormone" or "Somatotropin Releasing Hormone"	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	OFF	2007/02/21 15:23
S86	587	S85 AND ((gln or glutamine) same ("16" OR "30" OR "31" OR "36"))	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	OFF	2007/02/21 15:25
S87	507	S85 same (mutant or analog or analogue or variant)	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	OFF	2007/02/21 15:24
S88	476	S87 and (16! OR 30! OR 31! OR 36!)	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	OFF	2007/02/21 15:24
S89	504	S86 not S88	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	OFF	2007/02/21 15:24
S90	422	S89 and (mutant or variant or analog or analogue)	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	OFF	2007/02/21 15:26
S91	55	S85 AND ((gln or glutamine) near5 ("16" OR "30" OR "31" OR "36"))	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	OFF	2007/02/21 15:25
S92	44	S91 and (mutant or variant or analog or analogue)	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	OFF	2007/02/21 15:34
S93	7	holladay.in. AND S85	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	OFF	2007/02/21 15:41
S94	0	alza.in. AND S85 AND electrotransport	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	OFF	2007/02/21 15:42
S95	66	alza.as. AND S85 AND electrotransport	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	OFF	2007/02/21 15:42

## EAST Search History

S96	14	S95 and (histidine or his)	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	OFF	2007/02/21 15:42
S97	4	S96 and (glutamine or gln)	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	OFF	2007/02/21 15:44
S98	618	S85 AND ((glutamine or gln) near4 (histidine or his))	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	OFF	2007/02/21 15:44

Search History for 10/016,403

> d his

(FILE 'HOME' ENTERED AT 09:19:51 ON 07 MAR 2007)

FILE 'REGISTRY' ENTERED AT 09:20:16 ON 07 MAR 2007

E "GROWTH HORMONE RELEASING HORMONE"/CN 25  
E "GROWTH HORMONE RELEASING FACTOR"/CN 25  
E "SOMATOTROPHIN RELEASING FACTOR"/CN 25  
E "SOMATOTROPHIN RELEASING HORMONE"/CN 25  
E "GHRH"/CN 25  
E "GRF"/CN 25

L1 1 S E3

FILE 'MEDLINE, AGRICOLA, CAPLUS, BIOSIS, EMBASE, WPIDS' ENTERED AT  
09:30:21 ON 07 MAR 2007

L2 21301 S "GROWTH HORMONE RELEASING" (W) (HORMONE OR FACTOR)  
L3 21301 S "GROWTH HORMONE-RELEASING" (W) (HORMONE OR FACTOR)  
L4 3287 S SOMATOCRININ OR SOMATOLIBERIN  
L5 3 S "SOMATOTROPHIN RELEASING" (W) (HORMONE OR FACTOR)  
L6 3 S (SOMATOTROPHIN (W) RELEASING) (W) (HORMONE OR FACTOR)  
L7 602 S (SOMATOTROPIN (W) RELEASING) (W) (HORMONE OR FACTOR)  
L8 602 S (SOMATOTROPIN-RELEASING) (W) (HORMONE OR FACTOR)  
L9 17143 S GHRH OR GRF  
L10 26951 S L2 OR L4 OR L5 OR L7 OR L9  
L11 4895 S L10 AND (MUTANT? OR ANALOG? OR ANALOGUE? OR VARIANT? OR MUTAG  
L12 261 S L11 AND (16! OR 30! OR 31! OR 36!)  
L13 146 DUP REM L12 (115 DUPLICATES REMOVED)  
L14 72 S L13 AND (HUMAN OR SAPIENS)  
L15 36 S L13 AND (GLUTAMINE? OR GLN? OR Q?)

=>

**Steadman, David**

---

**From:** Steadman, David  
**Sent:** Friday, February 16, 2007 4:16 PM  
**To:** STIC-Biotech/ChemLib  
**Subject:** 10/016,403 sequence search request

NAME: David Steadman  
AU: 1656  
Date: 2/16/07  
Office: Remsen 2B05  
Mailbox: Remsen 3C70

**Please search the following sequence in commercial databases:**

Standard search of SEQ ID NO:8 against amino acid databases. Please provide 150 hits.

Thank you very much.

David

David J. Steadman, Ph.D.  
Primary Examiner  
Art Unit 1656  
Protein Crystallography and Recombinant Enzymes  
Office: Remsen 2B05  
Mailbox: Remsen 3C70  
Phone: (571) 272-0942

## Steadman, David

---

**From:** Steadman, David  
**Sent:** Tuesday, March 13, 2007 8:09 AM  
**To:** Chan, Christina  
**Subject:** RUSH 10/016,403 sequence search request

Ms. Chan,

This application is a 2-month amended. I would like to request the RUSH sequence search noted below. SEQ ID NO:8 is 44 amino acids. Thank you very much.

David Steadman

NAME: David Steadman  
AU: 1656  
Date: 3/13/07  
Office: Remsen 2B05  
Mailbox: Remsen 3C70

**Please search the following sequence in interference databases:**

Standard search of SEQ ID NO:8 against amino acid databases. Please provide 150 hits.

Thank you very much.

David

David J. Steadman, Ph.D.  
Primary Examiner  
Art Unit 1656  
Protein Crystallography and Recombinant Enzymes  
Office: Remsen 2B05  
Mailbox: Remsen 3C70  
Phone: (571) 272-0942